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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/715,486	11/19/2003	Masahiro Fukui	60188-697	4493
<div>7590 08/08/2007 Jack Q. Lever, Jr. McDERMOTT, WILL &amp; EMERY 600 Thirteenth Street, N.W. Washington, DC 20005-3096</div>			<div>EXAMINER GEBRESILASSIE, KIBROM K</div>	
			<div>ART UNIT 2128</div>	<div>PAPER NUMBER</div>
			<div>MAIL DATE 08/08/2007</div>	<div>DELIVERY MODE PAPER</div>

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Advisory Action**  
**Before the Filing of an Appeal Brief**

Application No.

10/715,486

Applicant(s)

FUKUI ET AL.

Examiner

Kibrom K. Gebresilassie

Art Unit

2128

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 10 July 2007 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☐ The period for reply expires \_\_\_\_\_ months from the mailing date of the final rejection.  
b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**NOTICE OF APPEAL**

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

**AMENDMENTS**

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
The status of the claim(s) is (or will be) as follows:  
Claim(s) allowed: \_\_\_\_\_.  
Claim(s) objected to: \_\_\_\_\_.  
Claim(s) rejected: \_\_\_\_\_.  
Claim(s) withdrawn from consideration: \_\_\_\_\_.

**AFFIDAVIT OR OTHER EVIDENCE**

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

**REQUEST FOR RECONSIDERATION/OTHER**

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
See Continuation.  
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). \_\_\_\_\_.  
13. ☐ Other: \_\_\_\_\_.

Applicants arguments filed on 07/10/2007 have been fully considered but they are not persuasive.

a. Applicants argued:

Applicants respectfully submit that Shiomi fails to disclose **intermediate data generated** during a simulation by the simulation means. Although intermediate data generated by the

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

In response to applicants argument that the reference (Bilchev et al) teaches the use of input/output device to input/output the data (i.e. intermediate data) from/to the encipher/decipher system (**See: Col. 8 lines 39-43, lines 47-50; Figs. 10**). However, Bilchev et al is silent whether the input/output devices are a simulation means. Shiomi et al discloses a simulation means (i.e. design/verification process) (**See: Fig. 1 element SB and corresponding texts**), which cures the deficiency of the reference of Bilchev et al.

b. Applicants argued:

With regard to Claims 9, 11, 13 and 15, the combination of Bilchev and Shiomi fails to disclose “intermediate data encrypting means for encrypting intermediate data generated during a simulation by the simulation means” or “an intermediate data encrypting step of encrypting intermediate data generated during a simulation in the simulation step.”

In response to applicants argument that the reference (Bilchev et al) teaches the use of input/output device to input/output the data (i.e. intermediate data) from/to the encipher/decipher system (See: Col. 8 lines 39-43, lines 47-50; Figs. 10). However, Bilchev et al is silent whether the input/output devices are a simulation means. Shiomi et al discloses a simulation means (i.e. design/verification process) (See: Fig. 1 element SB and corresponding texts).

c. Applicants argued:

Applicants respectfully submit that Bilchev fails to disclose a first and second encryption technique as recited by Claim 4. The Examiner asserts that Bilchev discloses three-input logic

In response to applicant's argument that the reference (Bilchev et al) teaches the use of three different encryption/decryption techniques of Fredkin's gate (See: Figs. 19-22 and corresponding texts).

Further, the prior art of reference teaches encryption/decryption technique such as Toffoli's gate (**See: Col. 12 lines 13-17**).

Therefore, the prior art of reference (Bilchev et al) teaches the use of different encryption techniques as claimed invention.

d. Applicants argued:

In other words, the supplied  
circuit information encrypted by a first encryption technique and the circuit information encrypted by a second encryption technique are different from each other, which means the encrypted results by the first and the second encryption techniques are different.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the supplied circuit information encrypted by a first encryption technique and the circuit information encrypted by a second encryption technique are **different from each other**) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

e. Applicants argued:

With regard to Claims 10, 12, 14, 16, and 17, the combination of Bilchev and Shiomi fails to disclose "supplied circuit information decrypting means for decrypting supplied circuit information encrypted by a first encryption technique and stored circuit information encrypting means for encrypting, by a second encryption technique, the circuit information decrypted by the supplied circuit information decrypting means, and for storing the encrypted circuit information in the storage means" or "a supplied circuit information decrypting step of decrypting supplied

In response to applicant's argument that the reference (Bilchev et al) teaches:

FIG. 10 is a functional diagram of the encipher apparatus. A signal to be enciphered is input by the data input device 200. This is then passed to a data block former 210 which forms the input signal into blocks of data which can be

sequentially passed through the encipher apparatus. The first block of data is then passed into the working memory 220 as a string of N bits where N is the block size. A circuit

(See: Col. 7 lines 64-67; Col. 8 lines 1-3).

Further, the reference (Bilchev et al) teaches the use of different encryption/decryption techniques such as Fredkin's gate (See: Figs. 19-22 and corresponding texts) and Toffoli's gate (See: Col. 12 lines 13-17).

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